

UNIT 8 REMEDIATION PACKET**Target 8A**

Write each polynomial in standard form. Then name each polynomial based on its number of terms and state the degree of the polynomial.

1. $7a + 4 - a^2$

2. $5b^2 + 2n$

3. $-11d^4$

4. $2x^3 - 9 + 2x + 8 - 4x$

Simplify. Write each answer in standard form.

5. $(5x^3 + 3x^2 - 7x + 10) - (3x^3 - x^2 + 4x - 1)$

6. $(4m^3 + 7m - 4) + (2m^3 - 6m + 8)$

7. $(8t^2 + t + 10) - (9t^2 - 9t - 1)$

8. $(6v + 3v^2 - 9v^3) + (7v - 4v^2 - 10v^3)$

Target 8B

Simplify. Write each answer in standard form.

9. $6x^3(3x^2 - x + 10)$

10. $-4h(-h^3 - 8h^2 + 2h)$

11. $4n(n^2 + 5n + 6)$

12. $(3q^2 + 6)(2q - 5)$

13. $(x + 6)(x - 7)$

14. $(p - 10)(2p + 5)$

15. $(4x^2 + 2x + 3)(3x - 8)$

16. $(5t^2 + 3t - 11)(6t - 1)$

Target 8C

Factor each polynomial by the GCF method.

17. $9t - 3$

18. $12j^3 + 28$

19. $72x^2 - 63x$

20. $12n^4 + 16n^3 + 20n^2$

21. $24y^6 + 36y^4 + 42y^2$

21. $7q^5 + 21q^3 - 49q$

Target 8D

Complete.

22. $n^2 + 9n + 18 = (n + 3)(n + \square)$

23. $t^2 + 9t + 14 = (t + 2)(t + \square)$

24. $d^2 + 11d + 30 = (d + 5)(d + \square)$

25. $v^2 + 2v + 1 = (v + 1)(v + \square)$

Factor each expression completely. Check your answer.

26. $g^2 + 6g + 8$

27. $y^2 + 10y + 24$

28. $r^2 + 12r + 35$

29. $3n^2 - 8n - 3$

30. $5a^2 - 22a + 8$

31. $2s^2 + 13s + 6$

32. $7r^2 - 9r - 10$

33. $2m^2 + m - 21$

34. $3g^2 + 20g + 32$

Target 8E

Factor each expression completely. Check your answer.

35. $w^2 + 14w + 49$

36. $s^2 + 16s + 64$

37. $9g^2 + 24g + 16$

38. $25m^2 - 60m + 36$

39. $4q^2 - 32q + 64$

40. $49y^2 - 84y + 36$

41. $108x^2 - 3$

42. $50n^2 - 8$

43. $405z^2 - 245$

Target 8F

Factor each expression by grouping. Check your answer.

44. $6n^3 + 3n^2 + 10n + 5$

45. $12z^3 + 36z^2 + 4z + 12$

46. $9k^3 + 45k^2 + 2k + 10$

47. $11a^3 + 33a^2 + 8a + 24$